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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,571	12/12/2003	Frank Born	5253-28	1867

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EXAMINER

TORRES, MELANIE

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,571

Applicant(s)

BORN ET AL.

Examiner

Melanie Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11, 12, 17-19, 22-24 and 27 is/are rejected.
- 7) ☒ Claim(s) 2-10, 12-17, 20-26 and 28-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/29/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because:

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

Correction is required. See MPEP § 608.01(b).

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The "second nonreturn valve" lacks antecedant basis in the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-10, 12-17, and 20-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "said first step" in line 6 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the smallest step" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 11, 12, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Schuttler.

Re claims 1-5, 11, 12, and 27, Schuttler discloses a piston/cylinder unit, comprising: a closed cylinder (103) defining a cylinder interior, a piston axially displaceably guided in said closed cylinder and having an annular seal (7a), said piston dividing said cylinder interior into first and second working spaces (105, 106), each of said first and second working spaces being filled with hydraulic fluid; a piston rod (104) connected to said piston, said piston rod extending through the cylinder interior and sealingly guided to the outside of the cylinder through a closing wall of said cylinder; a first non-return valve (111) arranged in said piston and having a first closing element (13) which is force-loaded in a closing direction toward a closed position, said first closing element being openable for connecting said first working space to said second working space when a pressure in said first working space exceeds a first opening pressure, and a second non-return valve (112) arranged in said piston and having a

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second closing element (14) which is force-loaded in a closing direction toward a closed position, said second closing element being openable for connecting said second working space to said first working space when a pressure in said second working space exceeds a second opening pressure, wherein a surface area of one of said first and second closing elements that is acted upon by a pressure in the respective one of said first and second working spaces increases when said one of said first and second closing elements moves along an opening stroke from the closed position toward an open position. (Figures 1 and 2)

7. Claims 1-5, 11, 12, 18, 19, 24 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 1459182.

Re claims 1-5, 11, 12, 18, 19, 24 and 27, Schuttler discloses a piston/cylinder unit, comprising: a closed cylinder (10) defining a cylinder interior, a piston axially displaceably guided in said closed cylinder and having an annular seal (38), said piston dividing said cylinder interior into first and second working spaces (34, 39), each of said first and second working spaces being filled with hydraulic fluid; a piston rod (16) connected to said piston, said piston rod extending through the cylinder interior and sealingly guided to the outside of the cylinder through a closing wall of said cylinder; a first non-return valve (29) arranged in said piston and having a first closing element which is force-loaded in a closing direction toward a closed position, said first closing element being openable for connecting said first working space to said second working space when a pressure in said first working space exceeds a first opening pressure,

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and a second non-return valve (35) arranged in said piston and having a second closing element which is force-loaded in a closing direction toward a closed position, said second closing element being openable for connecting said second working space to said first working space when a pressure in said second working space exceeds a second opening pressure, wherein a surface area of one of said first and second closing elements that is acted upon by a pressure in the respective one of said first and second working spaces increases when said one of said first and second closing elements moves along an opening stroke from the closed position toward an open position.

(Figure 1)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuttler in view of Oshida.

Re claims 6 and 22, Schuttler does not teach wherein the closing element includes a closing surface made of an elastomer. Oshida teaches wherein a closing element (8) includes a closing surface made of an elastomer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a closing element of elastomer as taught by Oshida in the piston/cylinder unit

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of Schuttler in order to provide further damping through the elasticity of the closing element.

10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schuttler in view of DE 1459182.

Re claim 23, Schuttler does not teach wherein the annular seal comprises a radially encircling sealing lip having a free end directed approximately towards the one of the first and second working spaces, the free end bearing resiliently against an inner wall of the cylinder. DE 1459182 teaches wherein an annular seal (38) comprises a radially encircling sealing lip having a free end directed approximately towards the one of the first and second working spaces, the free end bearing resiliently against an inner wall of a cylinder (37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an annular seal with a sealing lip in order to provide an improved sealing effect.

Allowable Subject Matter

11. Claims 25, 26, and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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12. Claims 7-10, 13-16, 20, and 21, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mintgen et al., and Kourbetsos teaches a piston cylinder unit comprising first and second nonreturn valves.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (703)305-0293. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703)308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MT
April 4, 2005

Melanie Torres
4-4-05